

**SITE ASSESSMENT
FOR
" 915 SOUTH KILDARE AVENUE DUMP "
CHICAGO, COOK COUNTY, ILLINOIS
TDD: T05-9410-110
PAN: EIL0841SBA**

October 7, 1994

Prepared for:

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Emergency and Enforcement Response Branch
77 West Jackson Boulevard
Chicago, Illinois 60604**

Prepared by:


Daniel Krieg, TAT Project Manager

Date:


10/7/94

Reviewed by:


Mary Jane Ripp, TAT QA Reports Manager

Date:

Approved by:


Thomas Kouris, TAT Leader

Date:

10/7/94

TABLE OF CONTENTS

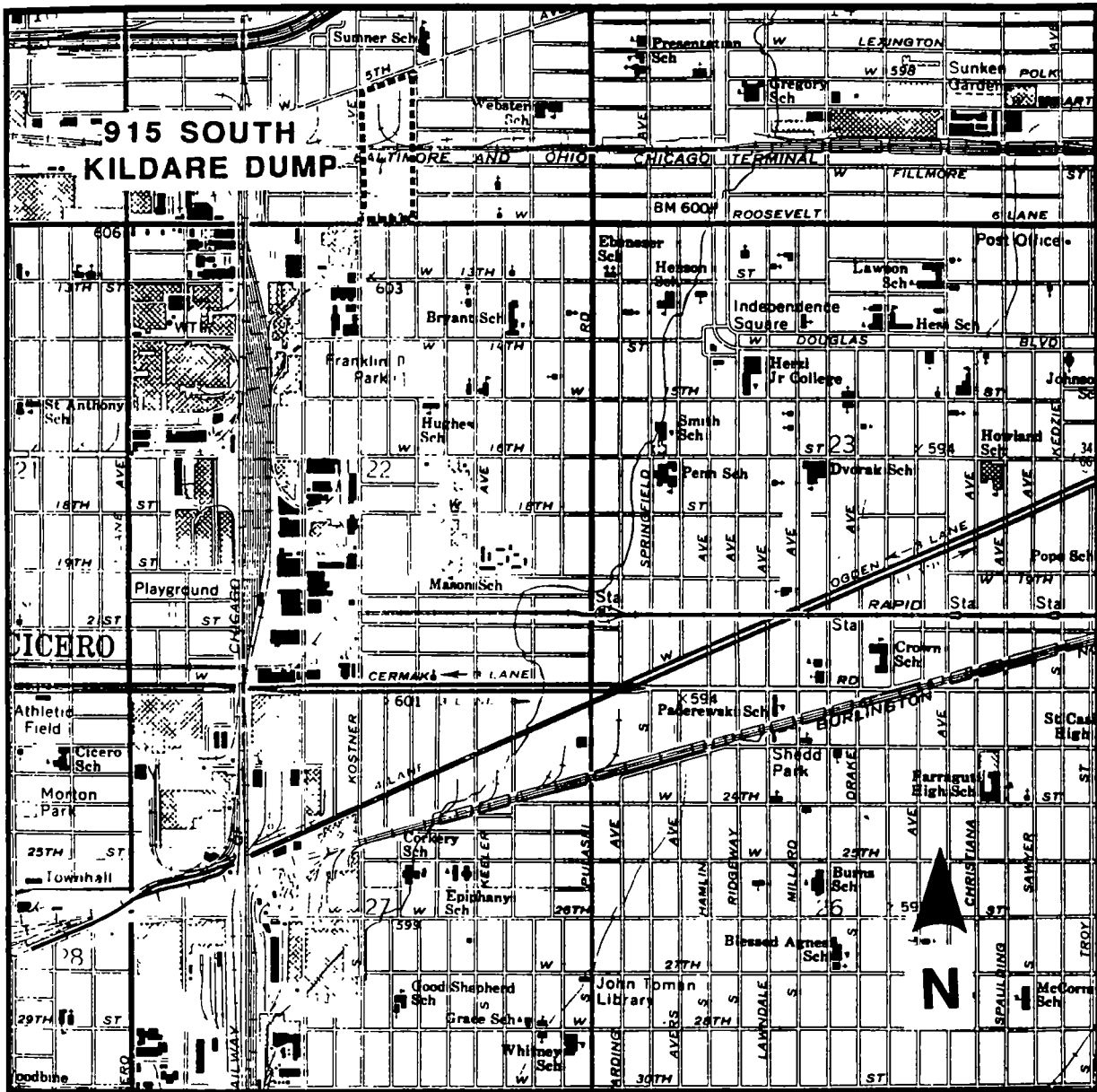
<u>Section</u>		<u>Page</u>
1	INTRODUCTION	1-1
2	SITE BACKGROUND	2-1
	2.1 SITE DESCRIPTION	2-1
	2.2 SITE HISTORY	2-2
3	SITE ASSESSMENT	3-1
4	ANALYTICAL RESULTS	4-1
5	DISCUSSION OF POTENTIAL THREATS	5-1
6	SUMMARY	6-1
 <u>Appendix</u>		
A	SITE PHOTOGRAPHS	A - 1
B	ANALYTICAL DATA VALIDATION	B - 1

LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1-1	Site Location Map	1-2
2-1	Site Features Map	2-3
3-1	Sample Location Map	3-4

1. INTRODUCTION

On July 1, 1994, the United States Environmental Protection Agency (U.S. EPA) tasked the Ecology and Environment, Inc. (E & E), Technical Assistance Team (TAT), under Technical Direction Document (TDD) T05-9406-024, to conduct a site assessment at the 915 South Kildare Avenue Dump, Chicago, Cook County, Illinois (Figure 1-1). The preparation of this report was completed under TDD T05-9410-110.



ecology and environment, inc.
Technical Assistance Team
Region V

111 W. Jackson Blvd., Chicago, Illinois 60604

TITLE	Site Location Map	FIGURE #	1-1
SITE	915 South Kildare Avenue Dump	SCALE	1:24,000
CITY	Chicago	STATE	Illinois
SOURCE	USGS Maps, 7.5-Minute Series Englewood, IL Quadrangle	PAN	EIL0841SAA
		DATE	1968
		REVISED	Oct. 7, 1994

2. SITE BACKGROUND

2.1 SITE DESCRIPTION

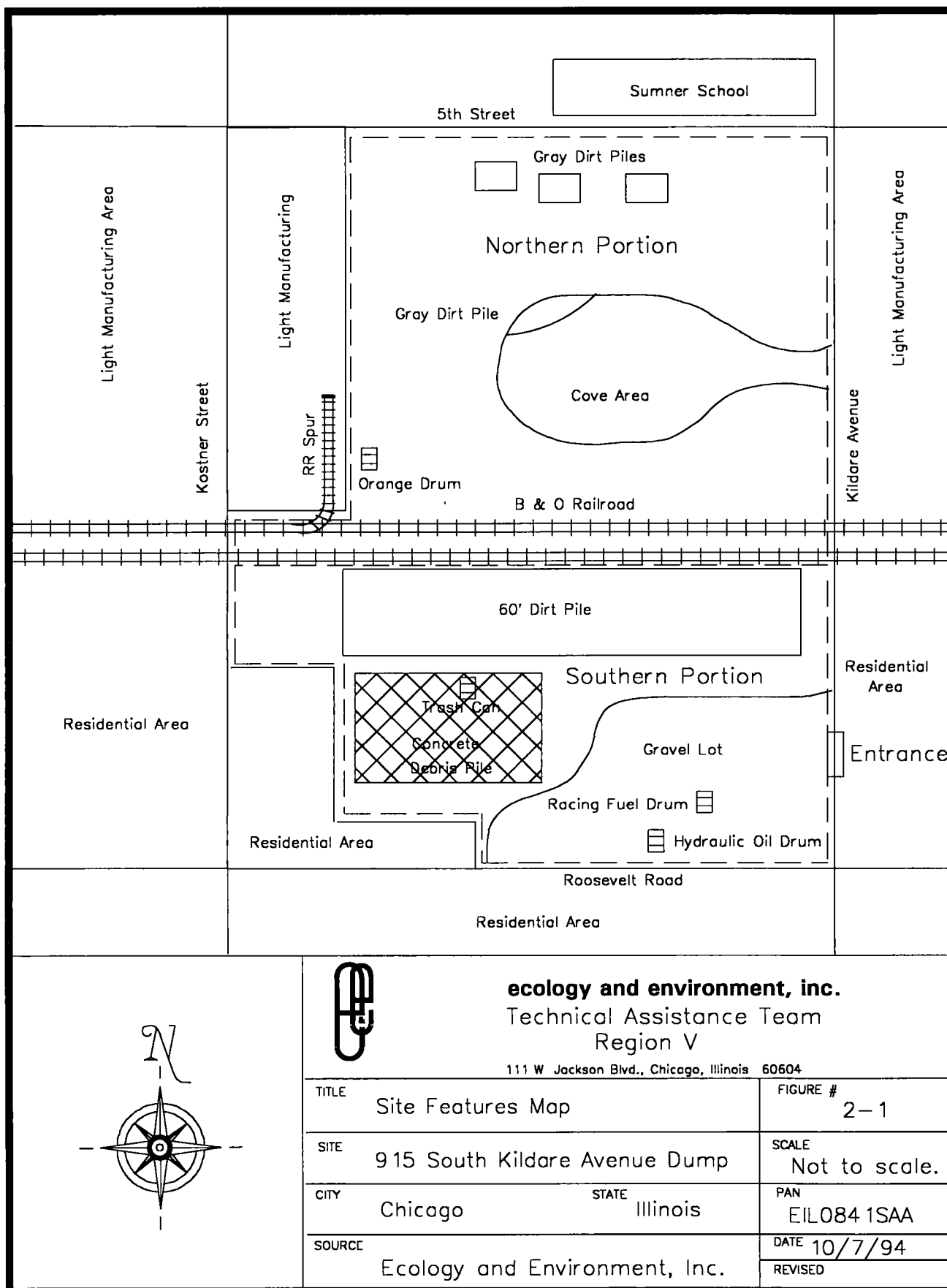
The 915 South Kildare Dump is a former construction debris and unknown materials disposal site located in Chicago, Cook County, Illinois. The site is bordered on the north by 5th Street, the east by Kildare Avenue, the west by Kostner Street and the south by Roosevelt Road. The dump is situated within a residential and industrial area. The site is located 50 feet to the south of the Sumner School, 50 feet to the east and west of residences and small manufacturing operations, and 50 feet to the north of residences. The dump, which appears to be comprised of dirt and concrete construction debris, covers approximately 17 acres of land. The debris rises between 20 and 60 feet above the surrounding ground level. Two parallel B & O Railroad lines pass through the site on an east-west axis just north of the 60-foot-high debris pile. The dump has been built up around the elevated tracks. (Figure 2-1)

The site was not secure due to large gaps in the perimeter fencing. The site also had tires and trash dumped along the east and west debris pile edges. The southern portion of the dump, defined as south of the B & O Railroad, consisted of a flat gravel area approximately 1 acre in size bordering Roosevelt Road, a pile of concrete waste approximately 30 feet high and 2 acres in size bordering residences to the west, and a large mound of dirt approximately 60 feet high and 3 acres in size bordering the B & O Railroad. The northern portion, defined as north of the B & O Railroad line, consisted of an entryway on Kildare Avenue that led to a 2-acre cove area in the center of the northern portion. The cove area was at the same elevation as the surrounding ground level. The remainder of the northern portion had a consistent elevation of approximately 25 feet above the surrounding ground level.

2.2 SITE HISTORY

The site name, 915 South Kildare Dump, and the actual location of the dump do not correspond. The dump is located on the west side of South Kildare Avenue, and 915 South Kildare is on the east side of the street. Residents near the dump informed TAT that the site previously had been the location of a tobacco factory and a rubber factory in an unknown time frame prior to the dump. Information obtained from the Chicago Sun-Times, June 30, 1994 issue, page 14, named John Christopher, also known as Kris Jon, as the responsible party for the dumping that ensued after the closing of the two factories. The Law Office of the City of Chicago verified that Christopher is implicated in the dumping. Christopher is listed as the registered agent for Crush-All, Inc., the company that is alleged to have dumped the construction debris and other unknown materials at the 915 South Kildare Dump site. At the present time, Christopher is the only potentially responsible party implicated in the dumping. The Law Office of the City of Chicago also indicated that the site has numerous owners. A majority of the site is presently owned by a non-profit organization named HICA.

U.S. EPA Region 5 had been approached by City of Chicago officials who were concerned with the welfare of the neighborhood surrounding the dump. The City of Chicago contracted Sacramento Crushing to remove 30,000 tons of concrete debris from the site by the end of 1994. However, prior to the Sacramento Crushing operations, the City of Chicago requested U.S. EPA to evaluate the site for potential hazardous materials that may have been landfilled at the site. On July 1, 1994, U.S. EPA On-Scene Coordinator Stavros Emmanouil tasked TAT to complete a site assessment at the 915 South Kildare Dump site.



3. SITE ASSESSMENT

On August 16, 1994, E & E TAT members Daniel Krieg, Steve Skare, and Tim Calloway, with U.S. EPA Site Assessment Managers Alan Altur and Owen Thompson, met with Lafayette Robertson, Senior Environmental Inspector for the City of Chicago and Karen Gordon, Environmental Engineer/Project Manager for the City of Chicago at the 915 South Kildare Dump site. The City environmental inspectors were present at the site to provide community relations since the dump site is located in a neighborhood prone to gang violence.

All personnel met north of the B & O Railroad lines on Kildare Avenue at 0930 hours and a site safety meeting was conducted. The weather conditions at the site were partly cloudy, 70°F, with a light easterly breeze.

TAT members Krieg, Skare, and Calloway completed the site reconnaissance in level C personnel protection. Instrumentation utilized at the dump site included an HNU photoionizer, a combustible gas indicator, and a Ludlum radiation detector. The U.S. EPA managers and city officials waited at the vehicles for security purposes while TAT performed the site assessment.

TAT began the assessment on the southern portion of the site. Two 55-gallon steel drums were observed on the gravel area, approximately 100 feet to the southwest of the main entrance. The first drum encountered was marked, "C-12 Racing Fuel, VP Racing Fuels, San Antonio, TX". The drum was empty and the instrument readings recorded within the drum were not above background levels. The second drum, marked "ISO 32AW Hydraulic Oil", was empty, and produced no instrument readings above background levels.

TAT proceeded to climb the large pile of construction debris located in the southern portion of the site. The debris pile consisted of large chunks (2 feet x 3 feet) of concrete and rock. TAT encountered a brown 30-gallon plastic trash can on the top of the concrete debris pile. The trash can appeared to contain 6 inches of rainwater and dirt. No instrument readings above background were recorded. TAT also investigated the 60-foot dirt pile but did not identify any unusual conditions.

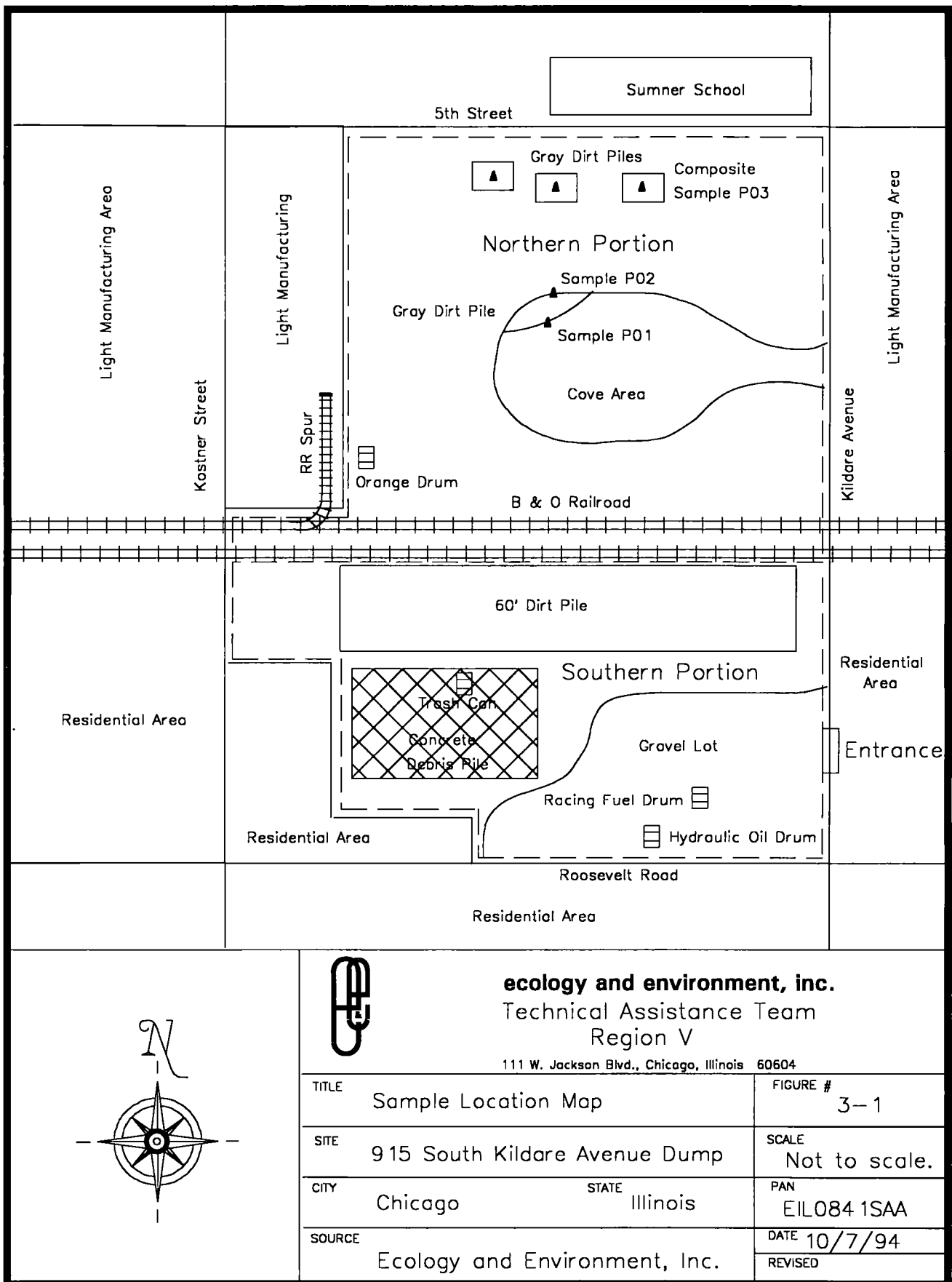
TAT did not identify stressed vegetation or stained areas during the investigation of the southern portion of the site.

TAT conducted a site reconnaissance on the northern portion of the dump starting with the cove area. Marble scrap piles were heaped on the southern edge of the cove. An area of distressed vegetation, corresponding to an area of gray soil, was identified near the north edge of the cove. TAT Skare observed the distressed area contained small chunks of brown flaky soil which indicated potential polychlorinated biphenyl (PCB)-contaminated waste. Further investigation of the northern portion of the dump identified additional piles of the gray soil with brown flaky material on the far northern boundary. No instrument readings above background were recorded for any of the areas of gray soil. An orange 55-gallon drum was located at the bottom of the far west slope of the northern portion of the dump. The drum was not marked, but produced an HNU reading of 16 parts per million (ppm) inside the drum. Approximately 6 inches of liquid was in the bottom of the drum. No other instrument readings above background were recorded.

TAT exited the northern portion of the site at noon to discuss the findings with the site assessment managers and the city environmental investigators. Upon consultation, it was determined that three samples were to be collected. The gray dirt pile in the cove area was to have two grab samples, one at the upper edge and the other at the bottom; and the gray soil piles found on the northern slope were to have a composite sample. The group then proceeded to the west slope of the landfill upon the request of Lafayette Robertson. Robertson directed TAT to the numerous residences on the east side of Kostner Street, south of the railroad, whose backyards border the dump. Recent trash and tire dumping was apparent at the bottom of the concrete debris slope. The group then returned to the entryway at the northern portion of the dump on South Kildare Avenue.

At 1240 hours, TAT, in Level C, entered the cove area to obtain the soil samples with a hand auger. Soil sample P01 was collected from the gray dirt pile on the northern side of the cove area at a depth of 0 to 6 inches (Figure 3-1). Sample P02 was collected from the top of the gray dirt pile on the northern side of the cove area at a depth of 0 to 6 inches. TAT exited the cove area with the soil samples and re-entered the site in Level C to collect a composite sample. Composite sample P03 was collected from the three gray soil piles on the northern slope of the dump with a shovel at 0 to 6 inches in depth. Auto fluff was found in one of the three gray soil piles and was included with the composite soil sample. All samples were placed in 32-ounce labeled glass jars. The glass jars were then placed in a cooler with vermiculite for transportation. On-site activities ceased at 1345 hours.

The samples and chain of custody form were hand-delivered by TAT Manager Dan Krieg on August 17, 1994, to National Environmental Testing, Inc., Bartlett, Illinois. The samples were analyzed for toxicity characteristic leaching procedure (TCLP) metals, TCLP volatile organic compounds, TCLP semivolatile organic compounds, and total PCBs under TDD T05-9408-803. Verbal notification of results were received in two weeks, and the Quality Assurance Level II data package was received within three weeks.



4. ANALYTICAL RESULTS

Analysis of the P01, P02, and P03 soil samples did not identify contamination above the method detection limits except for barium, which was detected at a level of 0.488 milligrams per liter (mg/L) in sample P01, 0.167 mg/L in sample P02, and 0.151 mg/L in sample P03. TCLP barium concentrations did not exceed the Maximum Contaminant Level for toxicity characteristic of 100.0 mg/L (as defined by the Resource Conservation and Recovery Act in the 40 Code of Federal Regulations (CFR) Section 261.24). Analytical data validation information is located in Appendix B.

5. DISCUSSION OF POTENTIAL THREATS

Conditions observed during the U.S. EPA investigation of the 915 South Kildare Dump site do not constitute a threat as outlined in Section 300.415(b)(2) of the National Contingency Plan (NCP).

6. SUMMARY

Soil samples obtained from areas of distressed vegetation and information gathered at the 915 South Kildare Dump do not indicate the presence of hazardous materials at the site; therefore, no removal actions for hazardous materials are requested.

APPENDIX A

SITE PHOTOGRAPHS



SITE NAME: 915 South Kildare Site
TDD: T05-9408-004
DATE: 8/16/94
TIME: 1015 Hours
PHOTOGRAPHER: Steve Skare
DIRECTION: South to West
SUBJECT: Front of site bordering Roosevelt Road and Kildare Streets. Site of concrete crushing operation.



SITE NAME: 915 South Kildare Site
TDD: T05-9408-004

DATE: 8/16/94
TIME: 1019 Hours

PHOTOGRAPHER: Daniel Krieg

DIRECTION: West to North

SUBJECT: View of site from gravel lot next
to Roosevelt Road (photos will
fold out into the large panoramic
picture).

K&M Division
Torrance, CA 90503
POLY-VU
1 P/1180



PHOTOGRAPHER: Daniel K. Kline
TIME: 10:15 Hours
DATE: 8/16/84
TBD: FOS-2403-004
SITE NAME: 915 South Kildare Site



SITE NAME: 915 South Kildare Site
TDD: T05-9408-004

DATE: 8/16/94
TIME: 1015 Hours

PHOTOGRAPHER: Daniel Krieg

DIRECTION: West

SUBJECT: C-12 racing fuel drum found on front gravel lot.



SITE NAME: 915 South Kildare Site
TDD: T05-9408-004

DATE: 8/16/94
TIME: 1018 Hours

PHOTOGRAPHER: Daniel Krieg

DIRECTION: Southwest

SUBJECT: ISO 32AW hydraulic oil drum found near front entrance on gravel lot very close to Roosevelt Road.



SITE NAME: 915 South Kildare Site
TDD: T05-9408-004

DATE: 8/16/94
TIME: 1028 Hours

PHOTOGRAPHER: Daniel Krieg

DIRECTION: West

SUBJECT: Top of concrete construction
 debris pile.



SITE NAME: 915 South Kildare Site
TDD: T05-9408-004

DATE: 8/16/94
TIME: 1025 Hours

PHOTOGRAPHER: Daniel Krieg

DIRECTION: South

SUBJECT: East face of construction debris
 pile next to the gravel lot.



SITE NAME: 915 South Kildare Site
TDD: T05-9408-004

DATE: 8/16/94
TIME: 1055 Hours

PHOTOGRAPHER: Daniel Krieg

DIRECTION: Northwest to Northeast

SUBJECT: View of the northernmost portion
of the landfill taken from atop
the southern portion of the
landfill. Gray dirt pile is
visible in center of picture.



SITE NAME: 915 South Kildare Site
TDD: T05-9408-004

DATE: 8/16/94
TIME: 1110 Hours

PHOTOGRAPHER: Daniel Krieg

DIRECTION: South to West

SUBJECT: View of the northern portion of
the landfill from the entrance to
the cove area on Kildare Avenue
(photos will fold out into the
large panoramic picture).



view of the northern portion of
the landfill from the entrance to
the cove area on Kildare Avenue
(photos will fold out into the
large panoramic pictures).

South to West

Daniel Kilday

1:10 Hours

8/16/74

705-9403-004

315 South Kildare Ave

SUBJECT:

DIRECTION:

PHOTOGRAPHER:

TIME:

DATE:

TID:

SITE NAME:



SITE NAME: 915 South Kildare Site
TDD: T05-9408-004

DATE: 8/16/94
TIME: 1035 Hours

PHOTOGRAPHER: Daniel Krieg

DIRECTION: West

SUBJECT: View of homes to the west of the
 concrete construction debris pile.



SITE NAME: 915 South Kildare Site
TDD: T05-9408-004

DATE: 8/16/94
TIME: 1040 Hours

PHOTOGRAPHER: Daniel Krieg

DIRECTION: North

SUBJECT: Plastic trash can on top of the
 concrete construction debris pile.



SITE NAME: 915 South Kildare Site
TDD: T05-9408-004

DATE: 8/16/94
TIME: 1120 Hours

PHOTOGRAPHER: Daniel Krieg

DIRECTION: Northwest

SUBJECT: Gray dirt pile within the cove
area of the northern portion of
the landfill.

SITE NAME: 915 South Kildare Site
TDD: T05-9408-004

DATE: 8/16/94
TIME: 1125 Hours

PHOTOGRAPHER: Daniel Krieg

DIRECTION: Northwest

SUBJECT: Gray dirt mounds found on
northernmost slope of landfill
adjacent to the Sumner School.
Approximate location of a grab
sample used for composite sample
P03.



SITE NAME: 915 South Kildare Site
TDD: T05-9408-004

DATE: 8/16/94
TIME: 1130 Hours

PHOTOGRAPHER: Daniel Krieg

DIRECTION: West

SUBJECT: More gray dirt mounds found on the northernmost slope of the landfill. Approximate location of a grab sample used for composite sample P03.

SITE NAME: 915 South Kildare Site
TDD: T05-9408-004

DATE: 8/16/94
TIME: 1145 Hours

PHOTOGRAPHER: Daniel Krieg

DIRECTION: West

SUBJECT: Orange drum found near the railroad spur along the bottom of the western slope of the northernmost portion of the landfill.



SITE NAME: 915 South Kildare Site
TDD: T05-9408-004

DATE: 8/16/94
TIME: 1245 Hours

PHOTOGRAPHER: Tim Calloway

DIRECTION: Northwest

SUBJECT: Gray dirt pile sampling site at
bottom of pile within cove area
(Sample P01).

SITE NAME: 915 South Kildare Site
TDD: T05-9408-004

DATE: 8/16/94
TIME: 1250 Hours

PHOTOGRAPHER: Tim Calloway

DIRECTION: South

SUBJECT: Gray dirt pile sampling site at
top of pile in cove area (Sample
P02).

APPENDIX B

ANALYTICAL DATA VALIDATION



ecology and environment, inc.

International Specialists in the Environment

111 West Jackson Boulevard

Chicago, Illinois 60604

Tel (312) 663-9415, Fax (312) 663-0791

MEMORANDUM

DATE: September 28, 1994

TO: Dan Krieg, TAT Project Manager, E & E, Chicago, Illinois

FROM: Herbert B. Langer, TAT Chemical Engineer, E & E, Detroit, Michigan

THROUGH: Emily Landis, TAT Geochemist, E & E, Cleveland, Ohio

SUBJECT: **Organic Data Quality Assurance Review, 915 South Kildare Site,
Chicago, Cook County, Illinois**

REFERENCE: Analytical TDD: T05-9408-803 Project TDD: T05-9406-024
Analytical PAN: EIL0841AAA Project PAN: EIL0841SAA

The data quality assurance review for three soil samples collected from the 915 South Kildare site in Chicago, Illinois, has been completed. Analysis for total Resource Conservation and Recovery Act (RCRA)-listed semivolatile compounds (EPA Method 8270) in leachate collected using the Toxicity Characteristic Leaching Procedure (TCLP) was performed by National Environmental Testing Laboratories, Bartlett, Illinois.

The samples were numbered P01, P02, and P03. These site numbers correspond to laboratory identification numbers 273672, 273673, and 273674, respectively.

Data Qualifications

I. Holding Time: Acceptable

The samples were collected on August 16, 1994. The TCLP was performed August 23, 1994. The leachate was analyzed August 26 and 30, 1994. The TCLP and analyses were performed within the required holding times for the method and matrix.

II. GC/MS Tuning: Acceptable

Decafluorotriphenylphosphine tuning compound was run within twelve hours of the sample. Ion abundance criteria were met for the instruments used.

III. Initial and Continuing Calibration Verification: Acceptable

Initial calibrations were performed on the instruments used for the analyses August 13 and 29, 1994. All average response factors were greater than zero, and percent relative standard deviations between calibration standard response factors were less than thirty, as required.

Continuing calibrations were performed on each day of analysis. Relative response factors were all greater than 0.05, as required. The percent differences between initial and continuing calibration response factors, for target compounds, were less than 25, as required.

IV. Method Blank: Acceptable

A method blank was run each day of analysis, on each instrument used. None of the target compounds were detected in the blanks above the instrument detection limits.

V. Optional Quality Control Analyses:

A. Matrix Spike/Matrix Spike Duplicate (MS/MSD): Acceptable

An MS and MSD were prepared using the low concentration standard and method blank. The percent recoveries of the spike compounds and relative percent difference between the spike results are within the laboratory's quality control guidelines.

B. Surrogate Recovery: Acceptable

A total of six surrogate compounds were added to each sample and the blank. The percent recoveries of the surrogate compounds were within the laboratory's quality control guidelines.

VI. Compound Identification: Acceptable

None of the target compounds were detected in the samples.

VII. Compound Quantitation and Reported Detection Limits: Acceptable

None of the target compounds were detected in the samples and dilution of the samples was not required. The reported detection limits are considered accurate as reported.

VIII. Overall Assessment of Data for Use:

The overall usefulness of the data is based on the criteria outlined in OSWER Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 4.0, BNAs by GC/MS Analysis. Based upon the information provided, the data are considered acceptable for use as reported.



ecology and environment, inc.

International Specialists in the Environment

111 West Jackson Boulevard
Chicago, Illinois 60604
Tel. (312) 663-9415, Fax (312) 663-0791

MEMORANDUM

DATE: September 28, 1994

TO: Dan Krieg, TAT Project Manager, E & E, Chicago, Illinois

FROM: Herbert B. Langer, TAT Chemical Engineer, E & E, Detroit, Michigan

THROUGH: Emily Landis, TAT Geochemist, E & E, Cleveland, Ohio

SUBJECT: **Organic Data Quality Assurance Review, 915 South Kildare Site, Chicago, Cook County, Illinois**

REFERENCE: Analytical TDD: T05-9408-803 Project TDD: T05-9406-024
Analytical PAN: EIL0841AAA Project PAN: EIL0841SAA

The data quality assurance review for three soil samples collected from the 915 South Kildare site in Chicago, Illinois, has been completed. Analysis for total Resource Conservation and Recovery Act (RCRA)-listed volatile organic compounds (U.S. EPA Method 8240) in leachate collected using the Toxicity Characteristic Leaching Procedure (TCLP) was performed by National Environmental Testing Laboratories, Barlett, Illinois.

The samples were numbered P01, P02, and P03. These site numbers corresponded to laboratory identification numbers 273672, 273673, and 273674, respectively.

Data Qualifications

I. Holding Time: Acceptable

The samples were collected on August 16, 1994. The TCLP was performed August 23, 1994. The leachate was analyzed August 25, 1994. The TCLP and analyses were performed within the required holding times for the method and matrix.

II. GC/MS Tuning: Acceptable

Bromofluorobenzene instrument tuning compound was run within twelve hours of the sample on the same instrument. Ion abundance criteria were met.

III. Initial and Continuing Calibration Verification: Acceptable

Initial calibration was performed August 10, 1994. All average response factors were greater than zero, and percent relative standard deviations between calibration standard response factors were less than 30, as required.

Continuing calibration was performed each day of analysis. Relative response factors were all greater than 0.05, as required. The percent differences between initial and continuing calibration response factors were less than 25, as required.

IV. Method Blank: Acceptable

A method blank was analyzed each day on each instrument used. None of the target compounds were detected in any blanks above the instrument detection limits.

V. Optional Quality Control Analyses:

A. Matrix Spike/Matrix Spike Duplicate (MS/MSD): Acceptable

An MS and MSD were prepared using the low concentration standard and method blank. The percent recoveries of the spike compounds and relative percent differences between the results were within the laboratory's quality control guidelines.

B. Surrogate Recovery: Acceptable

A total of three surrogate compounds were added to each sample and blank. The percent recoveries of the surrogate compounds were within the laboratory's quality control guidelines.

VI. Compound Identification: Acceptable

None of the target compound were detected in the samples.

VII. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 5.0, VOAs by GC/MS analysis. Based upon the information provided, the data are acceptable for use.



ecology and environment, inc.

International Specialists in the Environment

111 West Jackson Boulevard

Chicago, Illinois 60604

Tel (312) 663-9415, Fax (312) 663-0791

MEMORANDUM

DATE: September 28, 1994

TO: Dan Krieg, Project Manager, E & E, Chicago, Illinois

FROM: Herbert B. Langer, TAT Chemical Engineer, E & E, Detroit, Michigan

THROUGH: Emily Landis, TAT Geochemist, E & E, Cleveland, Ohio

SUBJECT: **Polychlorinated Biphenyl (PCB) Data Quality Assurance Review, 915 South Kildare Site, Chicago, Cook County, Illinois**

REFERENCE: Analytical TDD: T05-9408-803 Project TDD: T05-9406-024
Analytical PAN: EIL0841AAA Project PAN: EIL0841SAA

The data quality assurance review for three soil samples collected from the 915 South Kildare site in Chicago, Illinois, has been completed. Analysis for PCB compounds (U.S. EPA Method 8080) was performed by National Environmental Testing Laboratories, Bartlett, Illinois.

The samples were numbered P01, P02, and P03. These sample numbers correspond to laboratory identification numbers 273672, 273673 and 273674, respectively.

Data Qualifications

I Sample Holding Time: Acceptable

The samples were collected August 16, 1994, and extracted August 24, 1994, within the recommended 14 days for soil extraction. The extracts were analyzed August 28, 1994, within the required 40 day limit.

II Instrument Performance: Acceptable

Standard chromatograms show adequate peak resolution. Retention time shifts for surrogate compounds in daily standards were less than 0.3 percent, as required for the capillary columns used for the analyses.

III Calibration:

A. Initial Calibration: Acceptable

Initial calibration was performed using Aroclors 1242 and 1260, using five concentrations of standard solutions. The percent relative standard deviations of the response factors for each calibration standard were less than 10 as required.

B. Continuing Calibration: Acceptable

Continuing calibration was performed on the day of analysis. The percent differences between the initial calibration and continuing calibration response factors were less than 10, as required for quantitation columns.

IV Method Blank: Acceptable

A method blank was prepared and analyzed on the day sample analyses were performed, as required. None of the target Aroclors were detected in the blank above the instrument detection limit.

V Optional QC checks:

A. Surrogate Recoveries: Acceptable

The surrogate compound decachlorobiphenyl was added to each sample. The percent recoveries of the surrogate compound from each sample were within the laboratory's quality control guidelines.

B. Matrix Spike/Matrix Spike Duplicate (MS/MSD): Acceptable

An MS and MSD were prepared using sample P01. The percent recoveries of the spike compounds and relative percent differences between the MS and MSD results were within the laboratory's quality control guidelines.

VI Compound Identification: Acceptable

None of the target Aroclors were detected in the samples. Compound identification in the MS and MSD used correct fingerprint patterns for Aroclor identification. Since no Aroclors were detected in the samples, confirmation column calibration was not reported by the laboratory.

VII Compound Quantitation and Reported Detection Limits: Acceptable

None of the target Aroclors were detected in the samples. Dilution of the samples was not required. The reported detection limits are considered accurate as reported.

VIII Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on the criteria outlined in OSWER Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 7.0, PCBs. Based upon the information provided, the data are considered acceptable for use as reported.



ecology and environment, inc.

International Specialists in the Environment

111 West Jackson Boulevard
Chicago, Illinois 60604
Tel. (312) 663-9415, Fax (312) 663-0791

MEMORANDUM

DATE: September 28, 1994

TO: Dan Krieg, TAT Project Manager, E & E, Chicago, Illinois

FROM: Herbert B. Langer, TAT Chemical Engineer, E & E, Detroit, Michigan

THROUGH: Emily Landis, TAT Geochemist, E & E, Cleveland, Ohio

SUBJECT: **Inorganic Data Quality Assurance Review, 915 South Kildare Site, Chicago, Cook County, Illinois**

REFERENCE: Analytical TDD: T05-9408-803 Project TDD: T05-9406-024
Analytical PAN: EIL0841AAA Project PAN: EIL0841SAA

The data quality assurance review for three soil samples collected from the 915 South Kildare site in Chicago, Illinois, has been completed. Analysis for total Resource Conservation and Recovery Act (RCRA)-listed metals in leachate collected using the Toxicity Characteristic Leaching Procedure (TCLP) was performed by National Environmental Testing Laboratories, Bartlett, Illinois.

The laboratory used cold vapor atomic absorption to determine mercury (U.S. EPA Method 7470), standard atomic absorption to determine silver (U.S. EPA Method 7760), and the inductively coupled plasma technique (U.S. EPA Method 6010) to determine the remainder of the listed metals.

The samples were numbered P01, P02, and P03. These site numbers correspond to laboratory identification numbers 273672, 273673, and 273674, respectively.

Data Qualifications

I. Sample Holding Time: Acceptable

The samples were collected on August 16, 1994. The TCLP was performed August 25, 1994. The leachates was analyzed August 25 and 29, 1994. The TCLP and analyses were performed within the required holding times for the methods and matrix.

II. Initial and Continuing Calibration Verification: Acceptable

Calibration standards were analyzed at the beginning of the sample runs, and after every ten samples were analyzed during the runs, as required. The reported values for the calibration standards were within the recommended ± 10 percent of the mean values for ICP analyses. The correlation coefficients of the calibration curves for the instruments used for atomic adsorption analyses were satisfactory.

III. Blanks: Acceptable

Method blanks were prepared and analyzed within the recommended 20 samples of the target sample analyses. None of the target metals were detected in the blanks above the instrument detection limits.

IV. Interference Check Sample (ICS) Analysis: Acceptable

An ICS was analyzed during the ICP sample run. The results were within the required ± 20 percent of the mean values.

V. Matrix Spike/Matrix Spike Duplicate (MS/MSD): Acceptable

An MS and MSD were prepared and analyzed during the sample run. The percent recovery of the spike analytes and relative percent difference between MS and MSD results were within the laboratory's quality control guidelines.

VI. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on the criteria outlined in OSWER Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 3.0, Metallic Inorganic Parameters. Based upon the information provided, the data are considered acceptable for use as reported.



NATIONAL
ENVIRONMENTAL
TESTING, INC.

Corporate Headquarters
850 West Bartlett Rd
Bartlett, IL 60103
Tel (708) 289-1842
Fax (708) 289-2167

ANALYTICAL REPORT

Ms. Mary Jane Ripp
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

09/01/1994

Sample No. : 273672

NET Job No.: 94.06423

Sample Description: PO1 Soil sample; Grab
TCLP-PCB; T05-9408-803

Date Taken: 08/16/1994
Time Taken: 12:45
IEPA Cert. No. 100221

Date Received: 08/17/1994
Time Received: 11:10
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
Solids, Total	90.3	%	08/23/1994	0.1	mpl	104	2540 (4)
TCLP, ZHE Volatiles Prep	Leached		08/23/1994		las	133	1311 (1)
TCLP Metals Prep	Leached		08/23/1994		las	262	1311 (1)
Metals Prep, TCLP	Complete		08/25/1994		jmt	557	3010 (1)
Metals Prep, Ag TCLP	Complete		08/25/1994		mjb	223	7760 (1)
Metals Prep, Hg TCLP	Complete		08/25/1994		mjb	396	
TCLP - ICP	Complete	mg/L			mjb	120	6010 (1)
TCLP-Arsenic, ICP	<0.20	mg/L	08/29/1994	0.20	jmt	557 944	6010 (1)
TCLP-Barium, ICP	0.488	mg/L	08/29/1994	0.020	jmt	557 894	6010 (1)
TCLP-Cadmium, ICP	<0.010	mg/L	08/29/1994	0.010	jmt	557 869	6010 (1)
TCLP-Chromium, ICP	<0.040	mg/L	08/25/1994	0.040	jmt	557 843	6010 (1)
TCLP-Lead, ICP	<0.080	mg/L	08/25/1994	0.080	jmt	557 101	6010 (1)
TCLP-Mercury, CVAA	<0.0004	mg/L	08/25/1994	0.0002	mic	396 382	7470 (1)
TCLP-Selenium, ICP	<0.10	mg/L	08/29/1994	0.10	jmt	557 781	6010 (1)
TCLP-Silver, AA	<0.040	mg/L	08/25/1994	0.040	mic	223 262	7760 (1)
TCLP Organic Prep	Leached		08/23/1994		las	124	1311 (1)
Prep PCBs 8080 NonAqueous	extracted		08/24/1994		seh	193	3540A (1)
PCBs 8080 NonAqueous							
PCB-1016	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1221	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1232	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1242	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1248	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1254	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1260	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1268	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
Surr: Tetrachloroxylene (TCX)	Masked	%	08/27/1994	31-128	seh	193 113	8080 (1)
Surr: Decachlorobiphenyl (DCB)	87	%	08/27/1994	29-128	seh	193 113	8080 (1)
Prep, BNA Extract (TCLP)	extracted		08/24/1994		seh	250	3500 (1)





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Corporate Headquarters
850 West Bartlett Rd
Bartlett, IL 60103
Tel (708) 289-1842
Fax (708) 289-2167

ANALYTICAL REPORT

Ms. Mary Jane Ripp
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

09/01/1994

Sample No. : 273672

NET Job No.: 94.06423

Sample Description: PO1 Soil sample; Grab
TCLP-PCB; T05-9408-803

Date Taken: 08/16/1994
Time Taken: 12:45
IEPA Cert. No. 100221

Date Received: 08/17/1994
Time Received: 11:10
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
TCLP-ACID COMPOUNDS - 8270							
TCLP-Cresols, Total	<0.10	mg/L	08/30/1994	0.10	adl	250 573	8270 (1)
TCLP-3-Methylphenol (m-cresol)	<0.10	mg/L	08/30/1994	0.10	adl	250 573	8270 (1)
TCLP-2-Methylphenol (o-Cresol)	<0.10	mg/L	08/30/1994	0.10	adl	250 573	8270 (1)
TCLP-4-Methylphenol (p-Cresol)	<0.10	mg/L	08/30/1994	0.10	adl	250 573	8270 (1)
TCLP-Pentachlorophenol	<0.50	mg/L	08/30/1994	0.50	adl	250 573	8270 (1)
TCLP-2,4,5-Trichlorophenol	<0.50	mg/L	08/30/1994	0.50	adl	250 573	8270 (1)
TCLP-2,4,6-Trichlorophenol	<0.10	mg/L	08/30/1994	0.10	adl	250 573	8270 (1)
Surr: Phenol-d6	60	%	08/30/1994	10-94	adl	250 573	8270 (1)
Surr: 2-Fluorophenol	61	%	08/30/1994	21-100	adl	250 573	8270 (1)
Surr: 2,4,6-Tribromophenol	84	%	08/30/1994	10-123	adl	250 573	8270 (1)
TCLP-VOLATILES-8240							
TCLP-Benzene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Carbon Tetrachloride	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Chlorobenzene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Chloroform	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-1,4-Dichlorobenzene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-1,2-Dichloroethane	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-1,1-Dichloroethene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Methyl Ethyl Ketone	<0.200	mg/L	08/25/1994	0.200	llj	133 664	8240 (1)
TCLP-Tetrachloroethene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Trichloroethene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Vinyl Chloride	<0.160	mg/L	08/25/1994	0.160	llj	133 664	8240 (1)
Surr: 1,2-Dichloroethane-d4	100	%	08/25/1994	76-114	llj	133 664	8240 (1)
Surr: Toluene-d8	99	%	08/25/1994	88-110	llj	133 664	8240 (1)
Surr: Bromofluorobenzene	98	%	08/25/1994	86-115	llj	133 664	8240 (1)





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Corporate Headquarters
850 West Bartlett Rd
Bartlett, IL 60103
Tel (708) 289-1842
Fax (708) 289-2167

ANALYTICAL REPORT

Ms. Mary Jane Ripp
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

09/01/1994

Sample No. : 273672

NET Job No.: 94.06423

Sample Description: PO1 Soil sample; Grab
TCLP-PCB; T05-9408-803

Date Taken: 08/16/1994
Time Taken: 12:45
IEPA Cert. No. 100221

Date Received: 08/17/1994
Time Received: 11:10
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
TCLP BASE NEUTRAL COMPOUNDS							
TCLP-1,4-Dichlorobenzene	<0.10	mg/L	08/30/1994	0.10	adl	573 8270 (1)	
TCLP-Hexachloroethane	<0.10	mg/L	08/30/1994	0.10	adl	573 8270 (1)	
TCLP-Nitrobenzene	<0.10	mg/L	08/30/1994	0.10	adl	573 8270 (1)	
TCLP-Hexachlorobutadiene	<0.10	mg/L	08/30/1994	0.10	adl	573 8270 (1)	
TCLP-2,4-Dinitrotoluene	<0.10	mg/L	08/30/1994	0.10	adl	573 8270 (1)	
TCLP-Hexachlorobenzene	<0.10	mg/L	08/30/1994	0.10	adl	573 8270 (1)	
TCLP-Pyridine	<0.10	mg/L	08/30/1994	0.10	adl	573 8270 (1)	
Surr: Nitrobenzene-d5	82	%	08/30/1994	35-114	adl	573 8270 (1)	
Surr: 2-Fluorobiphenyl	73	%	08/30/1994	43-116	adl	573 8270 (1)	
Surr: Terphenyl-d14	84	%	08/30/1994	33-141	adl	573 8270 (1)	





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Corporate Headquarters
850 West Bartlett Rd
Bartlett, IL 60103
Tel (708) 289-1842
Fax (708) 289-2167

ANALYTICAL REPORT

Ms. Mary Jane Ripp
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

09/01/1994

Sample No. : 273673

NET Job No.: 94.06423

Sample Description: PO2 Soil sample; Grab
TCLP-PCB; T05-9408-803

Date Taken: 08/16/1994
Time Taken: 12:50
IEPA Cert. No. 100221

Date Received: 08/17/1994
Time Received: 11:10
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
Solids, Total	93.6	%	08/23/1994	0.1	mpl	104	2540 (4)
TCLP, ZHE Volatiles Prep	Leached		08/23/1994		las	133	1311 (1)
TCLP Metals Prep	Leached		08/23/1994		las	262	1311 (1)
Metals Prep, TCLP	Complete		08/25/1994		jmt	557	3010 (1)
Metals Prep, Ag TCLP	Complete		08/25/1994		mjb	223	7760 (1)
Metals Prep, Hg TCLP	Complete		08/25/1994		mjb	396	
TCLP - ICP	Complete	mg/L			mjb	120	6010 (1)
TCLP-Arsenic, ICP	<0.20	mg/L	08/25/1994	0.20	jmt	557 934	6010 (1)
TCLP-Barium, ICP	0.167	mg/L	08/25/1994	0.020	jmt	557 884	6010 (1)
TCLP-Cadmium, ICP	<0.010	mg/L	08/25/1994	0.010	jmt	557 860	6010 (1)
TCLP-Chromium, ICP	<0.040	mg/L	08/25/1994	0.040	jmt	557 843	6010 (1)
TCLP-Lead, ICP	<0.080	mg/L	08/25/1994	0.080	jmt	557 101	6010 (1)
TCLP-Mercury, CVAA	<0.0004	mg/L	08/25/1994	0.0002	mic	396 382	7470 (1)
TCLP-Selenium, ICP	<0.10	mg/L	08/29/1994	0.10	jmt	557 781	6010 (1)
TCLP-Silver, AA	<0.040	mg/L	08/25/1994	0.040	mic	223 262	7760 (1)
TCLP Organic Prep	Leached		08/23/1994		las	124	1311 (1)
Prep PCBs 8080 NonAqueous	extracted		08/24/1994		seh	193	3540A (1)
PCBs 8080 NonAqueous							
PCB-1016	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1221	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1232	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1242	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1248	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1254	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1260	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1268	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
Surr: Tetrachloroxylene (TCX)	Masked	%	08/27/1994	31-128	seh	193 113	8080 (1)
Surr: Decachlorobiphenyl (DCB)	91	%	08/27/1994	29-128	seh	193 113	8080 (1)
Prep, BNA Extract (TCLP)	extracted		08/24/1994		seh	250	3500 (1)





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Corporate Headquarters
850 West Bartlett Rd
Bartlett, IL 60103
Tel (708) 289-1842
Fax (708) 289-2167

ANALYTICAL REPORT

Ms. Mary Jane Ripp
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

09/01/1994

Sample No. : 273673

NET Job No.: 94.06423

Sample Description: PO2 Soil sample; Grab
TCLP-PCB; T05-9408-803

Date Taken: 08/16/1994
Time Taken: 12:50
IEPA Cert. No. 100221

Date Received: 08/17/1994
Time Received: 11:10
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
TCLP-ACID COMPOUNDS - 8270							
TCLP-Cresols, Total	<0.10	mg/L	08/26/1994	0.10	rla	250 571	8270 (1)
TCLP-3-Methylphenol (m-cresol)	<0.10	mg/L	08/26/1994	0.10	rla	250 571	8270 (1)
TCLP-2-Methylphenol (o-Cresol)	<0.10	mg/L	08/26/1994	0.10	rla	250 571	8270 (1)
TCLP-4-Methylphenol (p-Cresol)	<0.10	mg/L	08/26/1994	0.10	rla	250 571	8270 (1)
TCLP-Pentachlorophenol	<0.50	mg/L	08/26/1994	0.50	rla	250 571	8270 (1)
TCLP-2,4,5-Trichlorophenol	<0.50	mg/L	08/26/1994	0.50	rla	250 571	8270 (1)
TCLP-2,4,6-Trichlorophenol	<0.10	mg/L	08/26/1994	0.10	rla	250 571	8270 (1)
Surr: Phenol-d6	56	%	08/26/1994	10-94	rla	250 571	8270 (1)
Surr: 2-Fluorophenol	56	%	08/26/1994	21-100	rla	250 571	8270 (1)
Surr: 2,4,6-Tribromophenol	73	%	08/26/1994	10-123	rla	250 571	8270 (1)
TCLP-VOLATILES-8240							
TCLP-Benzene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Carbon Tetrachloride	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Chlorobenzene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Chloroform	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-1,4-Dichlorobenzene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-1,2-Dichloroethane	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-1,1-Dichloroethene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Methyl Ethyl Ketone	<0.200	mg/L	08/25/1994	0.200	llj	133 664	8240 (1)
TCLP-Tetrachloroethene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Trichloroethene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Vinyl Chloride	<0.160	mg/L	08/25/1994	0.160	llj	133 664	8240 (1)
Surr: 1,2-Dichloroethane-d4	104	%	08/25/1994	76-114	llj	133 664	8240 (1)
Surr: Toluene-d8	98	%	08/25/1994	88-110	llj	133 664	8240 (1)
Surr: Bromofluorobenzene	98	%	08/25/1994	86-115	llj	133 664	8240 (1)





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Corporate Headquarters
850 West Bartlett Rd
Bartlett, IL 60103
Tel (708) 289-1842
Fax (708) 289-2167

ANALYTICAL REPORT

Ms. Mary Jane Ripp
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

09/01/1994

Sample No. : 273673

NET Job No.: 94.06423

Sample Description: PO2 Soil sample; Grab
TCLP-PCB; T05-9408-803

Date Taken: 08/16/1994
Time Taken: 12:50
IEPA Cert. No. 100221

Date Received: 08/17/1994
Time Received: 11:10
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
TCLP BASE NEUTRAL COMPOUNDS							
TCLP-1,4-Dichlorobenzene	<0.10	mg/L	08/26/1994	0.10	rla	571	8270 (1)
TCLP-Hexachloroethane	<0.10	mg/L	08/26/1994	0.10	rla	571	8270 (1)
TCLP-Nitrobenzene	<0.10	mg/L	08/26/1994	0.10	rla	571	8270 (1)
TCLP-Hexachlorobutadiene	<0.10	mg/L	08/26/1994	0.10	rla	571	8270 (1)
TCLP-2,4-Dinitrotoluene	<0.10	mg/L	08/26/1994	0.10	rla	571	8270 (1)
TCLP-Hexachlorobenzene	<0.10	mg/L	08/26/1994	0.10	rla	571	8270 (1)
TCLP-Pyridine	<0.10	mg/L	08/26/1994	0.10	rla	571	8270 (1)
Surr: Nitrobenzene-d5	74	%	08/26/1994	35-114	rla	571	8270 (1)
Surr: 2-Fluorobiphenyl	55	%	08/26/1994	43-116	rla	571	8270 (1)
Surr: Terphenyl-d14	83	%	08/26/1994	33-141	rla	571	8270 (1)





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Corporate Headquarters
850 West Bartlett Rd
Bartlett, IL 60103
Tel (708) 289-1842
Fax (708) 289-2167

ANALYTICAL REPORT

Ms. Mary Jane Ripp
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

09/01/1994

Sample No. : 273674

NET Job No.: 94.06423

Sample Description: PO3 Soil sample; Comp
TCLP-PCB; T05-9408-803

Date Taken: 08/16/1994
Time Taken: 13:05
IEPA Cert. No. 100221

Date Received: 08/17/1994
Time Received: 11:10
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
Solids, Total	96.6	%	08/23/1994	0.1	mpl	104	2540 (4)
TCLP, ZHE Volatiles Prep	Leached		08/23/1994		las	133	1311 (1)
TCLP Metals Prep	Leached		08/23/1994		las	262	1311 (1)
Metals Prep, TCLP	Complete		08/25/1994		jmt	557	3010 (1)
Metals Prep, Ag TCLP	Complete		08/25/1994		mjb	223	7760 (1)
Metals Prep, Hg TCLP	Complete		08/25/1994		mjb	396	
TCLP - ICP	Complete	mg/L			mjb	120	6010 (1)
TCLP-Arsenic, ICP	<0.20	mg/L	08/25/1994	0.20	jmt	557 934	6010 (1)
TCLP-Barium, ICP	0.151	mg/L	08/25/1994	0.020	jmt	557 884	6010 (1)
TCLP-Cadmium, ICP	<0.010	mg/L	08/29/1994	0.010	jmt	557 860	6010 (1)
TCLP-Chromium, ICP	<0.040	mg/L	08/25/1994	0.040	jmt	557 843	6010 (1)
TCLP-Lead, ICP	<0.080	mg/L	08/25/1994	0.080	jmt	557 101	6010 (1)
TCLP-Mercury, CVAA	<0.0004	mg/L	08/25/1994	0.0002	mic	396 382	7470 (1)
TCLP-Selenium, ICP	<0.10	mg/L	08/29/1994	0.10	jmt	557 781	6010 (1)
TCLP-Silver, AA	<0.040	mg/L	08/25/1994	0.040	mic	223 262	7760 (1)
TCLP Organic Prep	Leached		08/23/1994		las	124	1311 (1)
Prep PCBs 8080 NonAqueous	extracted		08/24/1994		seh	193	3540A (1)
PCBs 8080 NonAqueous							
PCB-1016	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1221	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1232	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1242	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1248	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1254	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1260	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
PCB-1268	<50	ug/kg	08/27/1994	50	seh	193 113	8080 (1)
Surr: Tetrachloroxylene (TCX)	Masked	%	08/27/1994	31-128	seh	193 113	8080 (1)
Surr: Decachlorobiphenyl (DCB)	96	%	08/27/1994	29-128	seh	193 113	8080 (1)
Prep, BNA Extract (TCLP)	extracted		08/24/1994		seh	250	3500 (1)





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Corporate Headquarters
850 West Bartlett Rd
Bartlett, IL 60103
Tel (708) 289-1842
Fax (708) 289-2167

ANALYTICAL REPORT

Ms. Mary Jane Ripp
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

09/01/1994

Sample No. : 273674

NET Job No.: 94.06423

Sample Description: PO3 Soil sample; Comp
TCLP-PCB; T05-9408-803

Date Taken: 08/16/1994
Time Taken: 13:05
IEPA Cert. No. 100221

Date Received: 08/17/1994
Time Received: 11:10
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
TCLP-ACID COMPOUNDS - 8270							
TCLP-Cresols, Total	<0.10	mg/L	08/30/1994	0.10	adl	250 573	8270 (1)
TCLP-3-Methylphenol (m-cresol)	<0.10	mg/L	08/30/1994	0.10	adl	250 573	8270 (1)
TCLP-2-Methylphenol (o-Cresol)	<0.10	mg/L	08/30/1994	0.10	adl	250 573	8270 (1)
TCLP-4-Methylphenol (p-Cresol)	<0.10	mg/L	08/30/1994	0.10	adl	250 573	8270 (1)
TCLP-Pentachlorophenol	<0.50	mg/L	08/30/1994	0.50	adl	250 573	8270 (1)
TCLP-2,4,5-Trichlorophenol	<0.50	mg/L	08/30/1994	0.50	adl	250 573	8270 (1)
TCLP-2,4,6-Trichlorophenol	<0.10	mg/L	08/30/1994	0.10	adl	250 573	8270 (1)
Surr: Phenol-d6	56	%	08/30/1994	10-94	adl	250 573	8270 (1)
Surr: 2-Fluorophenol	59	%	08/30/1994	21-100	adl	250 573	8270 (1)
Surr: 2,4,6-Tribromophenol	94	%	08/30/1994	10-123	adl	250 573	8270 (1)
TCLP-VOLATILES-8240							
TCLP-Benzene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Carbon Tetrachloride	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Chlorobenzene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Chloroform	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-1,4-Dichlorobenzene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-1,2-Dichloroethane	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-1,1-Dichloroethene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Methyl Ethyl Ketone	<0.200	mg/L	08/25/1994	0.200	llj	133 664	8240 (1)
TCLP-Tetrachloroethene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Trichloroethene	<0.020	mg/L	08/25/1994	0.020	llj	133 664	8240 (1)
TCLP-Vinyl Chloride	<0.160	mg/L	08/25/1994	0.160	llj	133 664	8240 (1)
Surr: 1,2-Dichloroethane-d4	101	%	08/25/1994	76-114	llj	133 664	8240 (1)
Surr: Toluene-d8	98	%	08/25/1994	88-110	llj	133 664	8240 (1)
Surr: Bromofluorobenzene	96	%	08/25/1994	86-115	llj	133 664	8240 (1)





NATIONAL
ENVIRONMENTAL
TESTING, INC.

Corporate Headquarters
850 West Bartlett Rd
Bartlett, IL 60103
Tel (708) 289-1842
Fax (708) 289-2167

ANALYTICAL REPORT

Ms. Mary Jane Ripp
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

09/01/1994

Sample No. : 273674

NET Job No.: 94.06423

Sample Description: PO3 Soil sample; Comp
TCLP-PCB; T05-9408-803

Date Taken: 08/16/1994
Time Taken: 13:05
IEPA Cert. No. 100221

Date Received: 08/17/1994
Time Received: 11:10
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
TCLP BASE NEUTRAL COMPOUNDS							
TCLP-1,4-Dichlorobenzene	<0.10	mg/L	08/30/1994	0.10	adl	573 8270 (1)	
TCLP-Hexachloroethane	<0.10	mg/L	08/30/1994	0.10	adl	573 8270 (1)	
TCLP-Nitrobenzene	<0.10	mg/L	08/30/1994	0.10	adl	573 8270 (1)	
TCLP-Hexachlorobutadiene	<0.10	mg/L	08/30/1994	0.10	adl	573 8270 (1)	
TCLP-2,4-Dinitrotoluene	<0.10	mg/L	08/30/1994	0.10	adl	573 8270 (1)	
TCLP-Hexachlorobenzene	<0.10	mg/L	08/30/1994	0.10	adl	573 8270 (1)	
TCLP-Pyridine	<0.10	mg/L	08/30/1994	0.10	adl	573 8270 (1)	
Surr: Nitrobenzene-d5	72	%	08/30/1994	35-114	adl	573 8270 (1)	
Surr: 2-Fluorobiphenyl	65	%	08/30/1994	43-116	adl	573 8270 (1)	
Surr: Terphenyl-d14	87	%	08/30/1994	33-141	adl	573 8270 (1)	



NET Midwest, Bartlett Division

KEY TO ABBREVIATIONS and METHOD REFERENCES

<	: Less than; When appearing in the results column indicates the analyte was not detected at or above the reported value.
mg/L	: Concentration in units of milligrams of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per million (ppm).
ug/g	: Concentration in units of micrograms of analyte per gram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per million (ppm) or mg/Kg.
ug/L	: Concentration in units of micrograms of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per billion (ppb).
ug/Kg	: Concentration in units of micrograms of analyte per kilogram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per billion (ppb).
B	: Sample result flag indicating that the analyte was also found in the method blank analysis. The value after the B indicates the concentration found in the blank analysis.
D	: Sample result flag indicating that the reported concentration is from an analysis performed at a dilution. The value following the D indicates the dilution factor of the analysis.
J	: Sample result flag indicating that the reported concentration is below the routine reporting limit but greater than the Method Detection Limit. The value should be considered estimated.
TCLP	: These initials appearing in front of an analyte name indicate that the Toxicity Characteristic Leaching Procedure (TCLP) was performed for this test.
%	: Percent; To convert ppm to %, divide the result by 10,000. To convert % to ppm, multiply the result by 10,000.
Dry Weight (dw)	: When indicated, the results are reported on a dry weight basis. The contribution of the moisture content in the sample is subtracted when calculating the concentration of the analyte.
ICP	: Indicates analysis was performed using Inductively Coupled Plasma Spectroscopy.
AA	: Indicates analysis was performed using Atomic Absorption Spectroscopy.
GFAA	: Indicates analysis was performed using Graphite Furnace Atomic Absorption Spectroscopy.
PQL	: Practical Quantitation Limit; the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

Method References

- (1) Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", USEPA SW-846, 3rd Edition, 1986.
- (2) ASTM "American Society for Testing Materials"
- (3) Methods 100 through 499: see "Methods for Chemical Analysis of Water and Wastes", USEPA, 600/4-79-020, Rev. 1983.
- (4) See "Standard Methods for the Examination of Water and Wastewater", 17th Ed, APHA, 1989.
- (5) Methods 600 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants", USEPA Federal Register Vol. 49 No. 209, October 1984.
- (6) Methods 500 through 599: see "Methods for the Determination of Organic Compounds in Drinking Water," USEPA 600/4-88/039, Rev. 1988.